

Amendments to the Claims

Please cancel claims 1-4, 6-22, and 24-32, add new claims 44-60, and amend the claims as follows:

1.-4. (Canceled)

5. (Currently Amended) A substrate spin rinse dry cell, comprising:
a cell body defining an interior processing volume;
a substrate support member positioned in the processing volume, the substrate support member comprising:
a rotatable flywheel having a plurality of upstanding substrate engaging members extending therefrom, wherein each of the plurality of upstanding substrate engaging members comprises:
a pivotally mounted substrate engaging finger member; and
a fixedly mounted substrate support post member positioned in a channel formed into an inwardly facing surface of the substrate engaging finger member ~~The spin-rinse dry cell of claim 2,~~ wherein the substrate support post member further comprises a substantially horizontal substrate support surface having an angled substrate guide surface positioned radially outward of the substrate support surface; and
a central hub member positioned radially inward of the plurality of upstanding substrate engaging members, the central hub member having a fluid dispensing manifold configured to be in fluid communication with a plurality of backside fluid dispensing nozzles formed in an upper surface of the central hub member, wherein at least one backside gas nozzle is positioned on the upper surface; and
at least one frontside fluid dispensing nozzle positioned to dispense a rinsing fluid onto an upper surface of a substrate supported by the substrate support members.

6.-22. (Canceled)

23. (Currently Amended) A substrate rinsing cell, comprising:

a rotatable flywheel having a plurality of substrate engaging finger assemblies extending therefrom, each of the plurality of finger assemblies having an outer pivotally mounted substrate engaging member and an inner fixed substrate supporting member

The substrate rinsing cell of claim 16, wherein the inner fixed substrate support member comprises a post having an upper substantially horizontal substrate supporting surface and an inclined substrate centering surface positioned radially outward of the substrate supporting surface;

a central hub positioned in the central opening of the rotatable flywheel, the central hub having a fluid dispensing manifold formed therein;

a plurality of backside fluid dispensing nozzles formed on an upper surface of the central hub, wherein the plurality of backside fluid dispensing nozzles are connected to the fluid dispensing manifold and are configured to dispense a rinsing fluid onto a backside of a substrate; and

at least one frontside fluid nozzle configured to dispense a rinsing fluid onto a frontside of the substrate.

24.-43. (Canceled)

44. (New) The substrate rinsing cell of claim 23, wherein the outer pivotally mounted substrate engaging member has a vertical channel formed into an interior surface thereof, and the inner fixed substrate engaging member is positioned in the vertical channel.

45. (New) The substrate rinsing cell of claim 23, further comprising a plurality of flow circulation breaker members positioned over the rotatable flywheel.

46. (New) The substrate rinsing cell of claim 23, further comprising a substrate presence and planarity sensor.

47. (New) The substrate rinsing cell of claim 46, wherein the sensor comprises an optical emitter and an optical detector, the emitter and detector being positioned to emit an optical signal through a plane of the substrate to determine the presence of the substrate and in a path parallel and proximate to a surface of the substrate to determine planarity of the substrate.

48. (New) The substrate rinsing cell of claim 47, wherein the emitter and detector are positioned outside of a cell body containing the flywheel.

49. (New) The substrate rinsing cell of claim 23, wherein the plurality of finger assemblies comprise a rounded leading edge and a tapering trailing edge.

50. (New) The substrate rinsing cell of claim 23, wherein the leading edge of the finger assemblies has a first diameter and the trailing edge of the finger assemblies has a second diameter, the first diameter being larger than the second diameter.

51. (New) The substrate rinsing cell of claim 23, further comprising a horizontally positioned substrate engaging notch positioned proximate an upper terminating end of the finger assembly on an inwardly facing surface thereof.

52. (New) A substrate spin rinse dry cell, comprising:
a cell body defining an interior processing volume; and
a substrate support member positioned in the processing volume, the substrate support member comprising:

a rotatable flywheel having a plurality of upstanding substrate engaging members extending therefrom, wherein each of the plurality of upstanding substrate engaging members comprises:

a pivotally mounted substrate engaging finger member; and

a fixedly mounted substrate support post member positioned in a channel formed into an inwardly facing surface of the substrate engaging finger member, wherein the substrate support post member further

comprises a substantially horizontal substrate support surface having an angled substrate guide surface positioned radially outward of the substrate support surface; and

a central hub member positioned radially inward of the plurality of upstanding substrate engaging members.

53. (New) The spin rinse dry cell of claim 52, wherein the substrate engaging finger members further comprise a rounded leading edge having a first thickness and a tapering trailing edge portion having a second thickness, wherein the first thickness is greater than the second thickness.

54. (New) The spin rinse dry cell of claim 52, wherein the substrate engaging finger members further comprise a horizontally positioned substrate engaging notch positioned proximate an upper terminating end of the substrate engaging finger member.

55. (New) The spin rinse dry cell of claim 52, wherein the pivotally mounted upstanding substrate engaging members are pivotally actuated via vertical movement to contact a shield member positioned in a lower portion of the spin rinse dry cell.

56. (New) The spin rinse dry cell of claim 55, wherein the pivotally mounted substrate engaging finger members are configured to be actuated between an open position where a substrate may be loaded onto the support post members and a closed position where a bevel edge of the substrate is engaged by a horizontal channel formed into an inwardly facing surface of the finger member.

57. (New) The spin rinse dry cell of claim 52, further comprising a shield attached to the central hub member and extending radially outward therefrom, wherein the shield is configured to substantially cover the rotatable flywheel.

58. (New) The spin rinse dry cell of claim 52, further comprising at least two flow circulation breaker members attached to the central hub member and extending radially outward therefrom.

59. (New) The spin rinse dry cell of claim 52, further comprising a substrate sensing assembly positioned outside the cell body.

60. (New) The spin rinse dry cell of claim 59, wherein the substrate sensing assembly comprises at least one light emitter and at least one light detector, the emitter being positioned to emit an optical signal parallel to and just above the surface of a substrate that is properly positioned in the spin rinse dry cell and the detector being positioned to receive the optical signal.

61. (New) The spin rinse dry cell of claim 60, wherein the detector and emitter are positioned to determine presence and the planarity of the substrate relative to the substrate support members.